



## PATENT SPECIFICATION

DRAWINGS ATTACHED

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## COMPLETE SPECIFICATION

## Improved Means of Graduating Vessels

We, GASCOIGNES (READING) LIMITED, a British Company, of Gascoigne House, Berkeley Avenue, Reading, Berkshire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to transparent vessels for holding fluid materials and particularly glass jars of cylindrical form as used in milking installations for holding milk

The object of this invention is to provide for accurate graduation of the volumetric capacity of such vessels where these are not made with integral markings.

Jars for holding milk are invariably made of clear glass, that is, are wholly transparent, but it will be understood that the expression "transparent vessels" as employed herein may include any vessel through the wall of which the level of the contents is just visible.

In accordance with this invention a means for graduating a transparent vessel to indicate its contents comprises an adherent strip of flexible material having a slot opening or window therein which when said strip is applied to said vessel extends in the direction of the longitudinal axis of the vessel, said strip being so arranged that graduated markings flanking said slot opening or window are indicative of levels of quantities of a liquid contained in the vessel.

The most usual size of milking jar is of 4-gallon or 5-gallon capacity, and the shape of the mid-position is a vertical cylinder, and for such a vessel the graduating means according to this invention consists basically of a strip of transparent sheet material (such as a plastic) on which are printed graduation marks corresponding to the capacity of the vessel at ascending levels. The graduations may be printed in white on a black ground in order to present a contrast between the black and the white of the milk. Along the

longitudinal centre of the strip is a slot or window through which the transparent wall of the vessel can be viewed. The graduated edges of this central slot or window may have at regular intervals pointers projecting inwards in order to facilitate reading of the milk level.

A smooth plastic strip when applied to the surface of a smooth glass vessel will adhere firmly without at the same time "sticking" because the air between the two smooth surfaces has been excluded. Such a strip can be easily removed and as easily replaced. It will be understood, however, that an adhesively-held strip may be used, such as one coated on one side with a pressure-sensitive adhesive.

It is an advantage to have a datum line on the wall of the vessel. If this datum mark is not moulded or otherwise marked on by the manufacturer of the vessel it may readily be marked by the user. The procedure for making this datum line and for placing the graduated strip on the vessel will now be described with reference to the accompanying Figs. 1 and 2. A known quantity of liquid 1 is put into the vessel 2, when in its normal vertical position of use (Fig. 1); for convenience this quantity may be one gallon. At the level to which this liquid rises in the vessel an indelible mark 3 is made on the outside surface. This mark is used as a datum line for the placing of the graduated strip 4 in its correct relative position on the vessel, said vessel being conveniently lain on its side during this operation (Fig. 2).

The reason for the making of a datum mark is that because of the shape of the bottom of the glass vessel it would be most inconvenient to carry out calibration of this part of the vessel.

A suitable graduating strip, marked in pounds and gallons, is illustrated in Fig. 3. Although the strip 4 may have an actual slot or opening 5 therein it is preferred to make the strip of a transparent plastic material

and to overprint this with a background of black ink or some dark colour and with white lettering for the graduating marks and numbers, leaving a longitudinal central portion of the transparent material. The framed central portion thus constitutes a transparent window through which the level of milk or other liquid in the vessel may be seen. The edges flanking the slot or window 5 of strip 4 are preferably provided with inwardly directed pointers 6 and said edges could, of course, be marked according to any other suitable system of units, such as kilos and litres.

WHAT WE CLAIM IS:—

- 15 1. Means for graduating a transparent vessel to indicate liquid contents, comprising an adherent strip of flexible material having a slot opening or window therein which when said strip is applied to said vessel extends in the direction of the longitudinal axis of the vessel, said strip being so arranged that

graduated markings flanking said slot opening or window are indicative of levels of quantities of a liquid contained in the vessel.

2. Graduating means as claimed in claim 1, wherein said adherent strip is made of a plastic material of such character as to cling to the surface of the vessel without the use of an adhesive and has a longitudinal slot or window therein with different graduated weight and volume markings along the long edges of said slot or window with inwardly directed pointers at certain positions along said slot or window edges.

3. Graduating means for a transparent vessel substantially as illustrated in the accompanying drawings.

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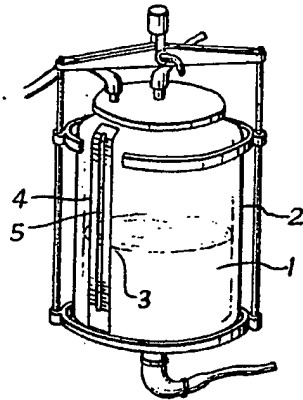


Fig. 1.

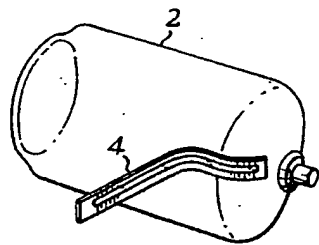


Fig. 2.

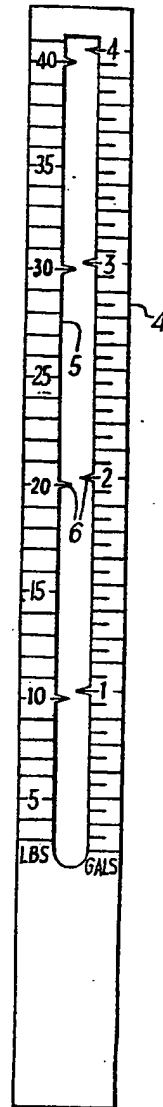


Fig. 3.